

This listing of claims will replace all prior versions and listings of claims in the prior application:

1. - 12. Canceled.

13. (currently amended) The **composition reagent** of claim **44 60** having a **physical** density of about ~~0.04~~ **1.01** g/cm<sup>3</sup> ~~greater than the density of an analytical liquid phase~~ to ~~0.14~~ **1.14** g/cm<sup>3</sup> ~~greater than the density of an analytical liquid phase~~.

14. (currently amended) The **composition reagent** of claim **44 60** having a density of about 1.14 g/cm<sup>3</sup>.

15. (currently amended) The **composition reagent** of claim **44 60** wherein the optical density of the composition is at least about 15 at a visible wavelength of maximal tracer absorbance.

16. (currently amended) The **composition reagent** of claim **44 60** wherein the optical density of the composition is about 200 - 400 at a visible wavelength of maximal tracer absorbance.

17.-19. Canceled.

20. (currently amended) The **composition reagent** of claim **44 60** wherein the polymerase is Taq polymerase.

21. (currently amended) The **composition reagent** of claim **44 60** wherein the tracer dye is comprised of acid violet 5 and acid red 1.

22. (currently amended) The **composition reagent** of claim 14 wherein the optical density of the composition is about 200 - 400 at a visible wavelength of maximal tracer absorbance, the polymerase is a Taq polymerase, and the tracer dye consists of 20% acid violet 5 and 80% acid red 1.

23.- 41. Canceled.

42. (currently amended) An **aqueous reagent composition** for an *ex-vivo* polymerase reaction in which a nucleic acid polymer product complementary to a nucleic acid polymer template is prepared, the **composition reagent** comprising Taq DNA polymerase and an anionic tracer dye **unbound to primer or nucleotides** which visually has a red appearance and a peak visible absorbance wavelength at between 430 and 617 nm **and a solute to increase the physical density of the reagent**, the **composition reagent having an optical density of about 5 to about 500 and** being **substantially** free of the **primer and the** nucleic acid polymer template **and having a physical density of at least about 1.01 g/cm<sup>3</sup>, but less than the density of the solute.**

43. (currently amended) The **composition reagent** of 42 wherein the **composition reagent** has a density of about 1.14 g/cm<sup>3</sup>.

44. (currently amended) The **composition reagent** of 43 wherein the **composition solute** comprises glycerol, trimethylglycine or a sugar.

45. (currently amended) The **composition reagent** of 42 wherein the **composition solute** comprises glycerol, trimethylglycine or a sugar.

46. (currently amended) The **composition reagent** of 43 wherein the **composition solute** comprises glycerol.

47. (currently amended) The **composition reagent** of 42 wherein the **composition solute** comprises glycerol.

48. (currently amended) An **aqueous reagent composition** for an *ex-vivo* polymerase reaction in which a nucleic acid polymer product complementary to a nucleic acid polymer template is prepared, the **composition reagent** comprising Taq DNA polymerase, **and** an anionic tracer dye **unbound to primer or nucleotides** consisting essentially of acid red 1 and acid violet 5, **and a solute to increase the physical density of the reagent**, the **tracer-dye reagent** having an optical density of about 5 to about 500 at a visible wavelength of maximal tracer absorbance, **the composition** being **substantially** free of the **primer and the** nucleic acid polymer template, **and having a physical density of at least about 1.01 g/cm<sup>3</sup>, but less than the density of the solute.**

49. (currently amended) The **composition reagent** of 48 wherein the **composition reagent** has a density of about 1.14 g/cm<sup>3</sup>.

50. (currently amended) The **composition reagent** of 49 wherein the **composition solute** comprises glycerol, trimethylglycine or a sugar.

51. (currently amended) The **composition reagent** of 48 wherein the **composition solute** comprises glycerol, trimethylglycine or a sugar.

52. (currently amended) The **composition reagent** of 49 wherein the **composition solute** comprises glycerol.

53. (currently amended) The **composition reagent** of 48 wherein the **composition solute** comprises glycerol.

54. – 59. Cancel.

60. (new) An aqueous reagent for use in forming a polymerase reaction mixture comprising a thermostable DNA polymerase, a nucleic acid polymer template, a primer, nucleotides, a detectible anionic tracer dye unbound to primer or nucleotides, and a solute to increase the physical density of the reagent, the reagent comprising the thermostable DNA polymerase, the detectible anionic tracer dye, and the solute but being substantially free of the primer and the nucleic acid polymer template, the reagent having an optical density of about 5 to about 500 at a visible wavelength of maximal tracer absorbance and a physical density of at least about  $1.01 \text{ gm/cm}^3$ , but less than the density of the solute.

61. (new) The reagent of claim 60 wherein the thermostable DNA polymerase is Taq and the concentration of Taq in the reagent is 0.033 to 10 units/ $\mu\text{l}$ .

62. (new) The reagent of claim 60 wherein the thermostable DNA polymerase is Taq and the concentration of Taq in the reagent is 0.06 to 5 units/ $\mu\text{l}$ .

63. (new) The reagent of claim 60 wherein the thermostable DNA polymerase is Taq and the concentration of Taq in the reagent is about 1 unit/ $\mu\text{l}$ .

64. (new) The reagent of claim 20, wherein the solute is sugar, trimethylglycine, or glycerol.

65. (new) The reagent of claim 20, wherein the solute is glycerol.